

REMARKS

This communication is in response to the Final Office Action of January 2, 2008.

Claims 1-20 were rejected under 35 USC §103(a) as being unpatentable over Tripunitara et al., in view of what was well known art. In response to the claim rejections Applicant has amended the claims to recite with greater clarity certain aspects of the claimed invention.

New dependent claims 21-23 were added that include a limitation that there is an extended cache residency lifetime to support detection of spoofing attacks. As described in paragraph [0028], a conventional ARP cache typically has too small a residency lifetime to be efficiently used to detect spoofing attacks. Increasing the cache residency time improves the efficiency with which snooping attacks can be detected.

The independent claims were amended to include a limitation comparable to previously presented claim 15 that the firewall is resident on the host computer.

Independent claims 1, 4, and 10 were amended to clarify that the firewall checks the authenticity of a new address resolution submitted by said unsolicited message.

Tripunitara does not teach or suggest the limitation of claim 1 of: "in response to determining that cached address resolution information for said network protocol address has an old address resolution which differs from said new address resolution submitted by said unsolicited message, said firewall issuing a request for network elements having said network protocol address to reply with address resolution information in order to check the authenticity of the unsolicited message submitting the new address resolution for the network protocol address" (emphasis added). The Examiner has cited passages in columns 3 and 5 of Tripunitara ; however the cited passages do not disclose all of these claim limitations. In particular, Tripunitara does not respond to the unsolicited requested by sending out a message to check authenticity. In contrast, Tripunitara blocks all unsolicited ARP responses from flowing to the host computer and furthermore drops the unsolicited ARP response. As described in column 5, lines 40-46 "If no corresponding entry exists in the responded Q, in step 55 the response frame is prevented from flowing up the stream to the host ARP cache since it is an unsolicited ARP response." Moreover, Tripunitara clearly teaches dropping unsolicited responses. Figure 6, lines 26-27 states that "this is an unsolicited response. Drop it and log the fact." As Tripunitara clearly teaches blocking and then dropping unsolicited responses it cannot, in combination with the other cited art, teach or

suggest all of the limitations of claim 1. For similar reasons, the other independent claims are also patentable as the combination of the references fails to teach or suggest all of the elements of the claimed invention.

Applicant furthermore notes that Tripunitara cannot be properly combined with general knowledge of the prior art to uphold a *prima facie* case of obviousness under 35 USC 103. As previously pointed out, Tripunitara teaches away from checking for spoofing attacks within a host computer. Tripunitara instead utilizes a modified protocol stack that resides in the network cloud at the gate to check for spoofing attacks. However, the protocol stack does not check an ARP cache. Instead, it utilizes separate queues for upward and downward flowing traffic to differentiate requests sent by a malicious host based on IP addresses. See, e.g., column 4, lines 57-60. For example column 5, lines 30-32 describes a “Requested Q in which ARP requests are remembered by recording the target IP address in the Requested Q.” One of ordinary skill in the art would not be motivated to modify Tripunitara to be resident on a local computer in the manner stated by the Examiner.

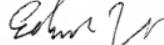
It is respectfully submitted that all of the pending claims are in condition for allowance. If there are any other residual formalities that need to be resolved prior to allowing the subject application, the Examiner is requested to contact the undersigned.

The Commissioner is hereby authorized to charge any appropriate fees to Deposit Account No. 50-1283.

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By:

Respectfully submitted,
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